

# Reset and healing break-out session summary

Warfighter Nutrition: Advanced Technologies and  
Opportunities”  
Uniformed Services University of the Health Sciences  
Health Affairs and DARPA co-hosts  
Day 2 (16 July 2008)

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# Clinical Recommendations

- All hospitalized DOD personnel should be given multiple vitamin / essential fatty acid supplements. The doses should be similar to that which is provided to NASA astronauts
- ASD Health Affairs should have staff assigned to collect knowledge of all clinical DOD studies to prevent duplication and promote coordination

# Needed Research: Recommendations

- A pre-deployment, prospective, placebo-controlled, double blind study in a Brigade Combat Team beginning 6 months prior to deployment and lasting 6 months after deployment using supplements including omega-3 fatty acids, and measuring mental health and other outcomes of significance. This could provide evidence that all deployed troops should be given such supplements.

# Needed Research: Recommendations

- A retrospective, case control study of PTSD and depression using existing banked serum from the Defense Medical Surveillance System and measuring omega-3 fatty acids, vitamin D, homocysteine, and perhaps CRP and Zn. This could be accomplished in a very short time frame.
- Develop and test a ketogenic diet (which includes omega-3 fatty acids) for critically ill and / TBA patients whose diet is completely controlled.

# Needed Research: Recommendations

- Trauma recovery study in a civilian trauma center testing IV omega-3 formulation vs. standard care; should include follow up with enteric feeding.
- Trauma recovery study in a civilian trauma center testing IV glutamine vs. standard care; should include follow up with enteric feeding.

# Technology development

- Portable finger stick device to measure omega-6/omega-3 ratio, vitamin D, Glucose during medical evacuation at altitude.
- Low cost fiber optic feeding tube e.g. a better feeding tube placement system
- Finger stick device to measure multiple nutrients and provide individualized nutritional advice